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3 **RUGGEDIZED FIBER OPTIC SOUND VELOCITY PROFILER**

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5 **ABSTRACT OF THE DISCLOSURE**

6 The present invention relates to an optical fiber cable for
7 use with a system for determining a velocity profile of sound in
8 a medium. The optical fiber cable comprises an inner layer of
9 strength members, an outer layer of strength members, and at
10 least one tube containing at least one optical fiber
11 incorporated into the outer layer. The at least one optical
12 fiber has a plurality of Bragg grating sensors spaced along its
13 length.